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ABSTRACT

The purposes of this study were to investigate the status of nonfiction in the reading interests of second, third, and fourth graders and to determine the effectiveness of a personal reading record as a measure of reading interests. All students in the second, third, and fourth grades of a middle-class rural area in central New Jersey served as subjects in this study. Students were asked to keep a record of the books that they read in their free time for a period of 3 months. When the sheets were collected, a stratified random sample was taken to provide a population of 120 students, 40 at each of the three grade levels. The percent of nonfiction books read was calculated for each of the reading records of these students. Frequency tables were made for the percentages by grade, sex, and reading ability. A chi-square test for independent samples was used for each of the variables. The results indicated that there was no significant increase in the number of nonfiction books read as the grade increased, but that an average of one-fifth of the books read by each grade was nonfiction. Reading ability was also shown to have no effect on the books read by boys and that read by girls. (WR)

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THE STATUS OF NONFICTION IN THE READING INTERESTS OF SECOND, THIRD AND FOURTH GRADERS

A THESIS

SUBMITTED TO THE FACULTY

OF THE GRADUATE SCHOOL OF EDUCATION

OF

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JUDITH R. BLAIR

IN PARTIAL FULFILLMENT OF THE

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OF

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Chapter 1

INTRODUCTION

Teachers of the elementary grades will readily admit that reading is the dominant subject in their classrooms. When reading is not being taught as a subject in itself, it is being used in conjunction with other subjects. Many attractive trade books are available from a variety of sources and a wide assortment of reading kits and games appear in classrooms to intrigue the young reader. Yet, there seems to be a large number of students that cannot or do not read even for their own enjoyment.

Causes for reading difficulty and reading reluctance vary with the individual but one common factor seems to be a lack of interest in reading. Interest is an important factor in certain human behaviors, learning in particular, because it has the ability to impel an individual to action (Witty and others, 1959). It can even help to override difficulties with a task or subject that might hinder success. Without interesting material, the desire to learn and acquire skills may not be present. Without the skills, the task or subject becomes difficult and tedious and interest diminishes. Interest in reading and the acquisition of skills seem to be interdependent (Meisel and Glass, 1970). Reading instructors must consider both of these factors if instruction is to be a worthwhile experience for each individual. Studies on reading interests are an important source of information to consider in selecting appropriate instructional material.

Much of the reading interest research has concerned itself with fifth grade through high school where reading problems interfere with learning in the subject areas. Through the findings of this research many new trade books and instructional materials have been published to better meet the interests of these older students, boys in particular. High interest-low vocabulary books are being made available to revive interest and strengthen reading skills. More nonfiction has been included in basals for the intermediate grades (Harris, 1972) to meet the demands for factual material. Yet, interest in reading would not have to be revitalized in the upper grades if it were not inhibited in the lower grades.

Since reading instruction begins in kindergarten, it is just as important to know more about the reading interests of primary children. By the fifth grade youngsters are expected to have developed sufficient reading skills to enable them to read for knowledge as well as for pleasure. So, trade books and basals even for first grade should provide material in a wide variety of subjects that not only develops interest in reading but provides satisfactory training to meet the future demands for reading skill. Primary material must not be meeting these demands adequately if remedial readers and reluctant readers are numerous even in the lower grades.

One problem may be the narrow interest range of primary books in current use. The basal readers in the lower grades seem to be predominantly fictional in content. Fantasies about animals and

children and stories of family life dominate primary basals (Smith, 1962, and Harris, 1972). Books for independent reading found in primary classrooms and school libraries are generally colorful storybooks of modern fantasies or fairy tales. Yet, TV, which receives a larger share of the child's attention than books, presents factual as well as fictional programs. Even the fictional shows that seem popular with young children are not limited just to animal fantasies. The young child's interests seem to be broader than the basals or trade books would indicate.

An overabundance of fiction in the lower grades could be putting undesirable and unnecessary limitations on reading and also hampering the development of skills needed for content readers. A comparison of the amount of fiction and nonfiction read by lower grade students in their free time should reveal what the appropriate balance of fact and fiction should be in primary books from an interest standpoint.

The Statement of the Problem

The purpose of this study was to learn more about the status of nonfiction in the reading interests of second, third and fourth graders by determining the percent of the books read in their freetime that were nonfiction. Variables of sex and reading ability were also used. Answers to the following questions were sought:

1. What percent of the reading done by second, by third and by fourth graders is nonfiction? Does the percent of nonfiction increase with grade level?

2. Do boys in these grades read significantly more nonfiction than girls in these grades?

3. Does reading ability affect the amount of nonfiction read at these grade levels?

Hypotheses. These hypotheses were tested:

1. There will be no significant difference between the percents of nonfiction books out of the total number of books read by second graders, by third graders and by fourth graders.

2. There will be no significant difference between the percents of nonfiction read by all the boys and the percents read by all the girls in the grades combined.

3. There will be no significant difference between the percents of nonfiction books read by those children scoring at or above the local mean on the standardized reading test and the percents of nonfiction books read by those children scoring below the local mean on the test in the three grades combined.

Secondary problems. The answers to these secondary questions were also sought:

1. What was the average number of books read in a month's time?

2. Where did the children get most of the books they read in their free time?

3. What categories of nonfiction were most popular with boys and most popular with girls?

The Importance of the Study

Although most reading interest studies separate books into specific categories such as fantasy, adventure, history and science, there are several reasons for examining just the two general headings of fiction and nonfiction. The first reason is the tendency of adults to expect fiction in general to be the prime reading material for younger students (Bond and Wagner, 1950). This is apparent in the fact that basals for the primary grades feature fiction almost exclusively (Harris, 1972). Nonfiction is considered primarily as resource material not as leisure reading. If any of primary children's free reading is actually given to factual material, the interest content of primary basals should be assessed. Younger students may not be getting the same balance of fact and fiction in instructional material as they seek in recreational reading.

A second reason for using the two broad headings is the important function factual material may have in developing better critical reading skills. Johnson (1970) stated that factual expository material would be much better for practicing most of these skills. Perhaps nonfiction material can not only meet children's interests, but it might also strengthen reading skills that are needed for handling science and social studies texts in the upper grades (Bond and Wagner, 1950).

Thirdly, a comparison of just fiction and nonfiction eliminates a problem found in many studies. Although separate categories would be more useful in determining interests, categories can differ

considerably from study to study depending on how specific the researcher was with a topic. For example, talking animals might be a specific category in one study, included under animals in another or placed under fantasy in a third study. Some researchers further complicate classification by using qualities such as humor and action as subject headings as well as the standard ones. Meisel and Glass (1970) mentioned having difficulty assigning stories to specific categories in their own study, probably because some books can fit into several categories. For instance, machines can be considered part of science or transportation or be a category of its own. The two general headings can help by serving as a starting point for comparison of reading interests.

Definition of Terms

Interest. Getzels (1966) has made an important distinction between a preference and an interest. He stated, "A preference is a disposition to receive one object as against another (p. 97)." A preference is a willingness to accept and is basically a passive process. In describing an interest Getzels wrote, "...the basic nature of an interest is that it does induce us to seek out particular objects and activities (p. 97)." The seeking out of an object or activity suggests an active process. He went on to define an interest as "a characteristic disposition organized through experience which impels an individual to seek out particular objects,

activities, understandings, skills or goals for attention or acquisition (p. 98)." This study has used the same distinctions as Getzels and has considered interests to be acquired traits that have the potential to direct an individual to choose one kind of reading material over another. Interests refer to the selection of particular kinds of books not just a passive disposition to them.

Fiction and nonfiction. Fiction is used in this study for books that include fantasy, fairy tales, myths and legends, historical fiction, science fiction and realistic fiction. The term nonfiction is used for books that include science, history, geography, social studies, sports, biography and any other factual book.

Reading ability. This term is used to refer to the achievement of students in learning to interpret written or printed symbols meaningfully (Harris, 1970). Reading scores from the Cooperative Primary Tests (1967) and the Sequential Tests of Educational Progress (1970) were used for determining the reading ability of the test population. Those students scoring at or above the local mean on the reading sections of these tests were considered to have sufficient ability to read materials suitable for their grade placement. Those students scoring below the local mean were considered to be below grade level in reading and having at least some difficulty reading material suitable for their grade level.

Limitations of the Study

Although the study dealt with primary grades, first grade students were not included due to the lack of reading and writing

ability needed to provide the desired information. Fourth graders were included to show the carry-over from primary to intermediate grades where science and social studies become more distinct subjects.

The availability of books would have a definite effect on the number and kind of books read. Sources of books for the study population are given in Chapter 3. The number of good nonfiction books of low readability available may have restricted students' selections.

The reading record method did not provide information on the reasons for choosing a particular book. The investigator could not be certain that the children selected the books that were recorded only for their content without questioning each child about each book. The size, the jacket or the illustrations of the book could have been other factors in book selection.

In presenting the task to the children, the investigator avoided mention of the specific purpose of the study to prevent the students from reading more nonfiction than they might usually read. Instead, the investigator told the students that she wanted to learn more about the kinds of books children read. However, the actual reading interests of the students might still have been influenced by their desire to please the investigator. The students might have recorded the kinds of books they thought the investigator would prefer rather than the kinds of books they liked to read.

The adult concept of appropriate material for primary children could also have influenced the children's reading habits. If

teachers, parents or librarians expected children to read fictional stories, the children might have been compelled to read only fictional books to meet adult expectations. The kinds of books read orally to the children by parents and teachers could also have influenced their reading choices. On the other hand, the teachers' stress on science and social studies might have caused the children to favor factual books or read them for assignments. But, interests are affected by the child's experience and are expected to be susceptible to outside influences.

Overview

Chapter 2 is the review of the related research. It has been divided into the following sections: Methods for studying reading interests; Methods used with younger students; General findings for age, sex and reading ability; The limited interest content of primary material; The pros and cons for nonfiction in primary reading.

Chapter 3 discusses the method used, the procedure that was followed and the statistical analysis. Chapter 4 presents the results in both written and table form. Chapter 5 gives a summary of the study, the investigator's conclusions from the study and suggestions for further research.

Chapter 2

A Review of the Literature

Children's reading interests have been a constant concern of educators for many years (Weintraub, 1969). The first known study on reading interests was done in 1893 by M. B. C. True (Witty and others, 1960). From that time until the writing of her article, Zimet (1966) reported there had been more than three hundred studies done on reading interests and many have been done since that time. Yet, the studies have varied so widely not only in size of the sample, and age and ability of the population, but also in method and results. Weintraub (1969), in reviewing interest studies, commented on the need for improvement of methods for more dependable results. Since the method seems to strongly affect the findings, it seems appropriate to first review some of the methods used in interest studies in general and the influence each method can have on the data. Then the particular problems of studies using primary populations will be discussed.

Methods for studying reading interests.

Purves and Beach (1972) cited the questionnaire as the most popular device for measuring reading interests. McKay (Purves and Beach, 1972) found the questionnaire was used two to one over rating lists and two and a half to one over observations. The purpose of a questionnaire is "to ask subjects to list or rank order preferred titles or types, to give reasons for preferences or to provide background information (Purves and Beach, 1972, p. 62)." But responses to questionnaires can be limited to books most recently read, can be influenced by what the subject thinks the adult expects or wants to know and are artificial tools not actual book selection (Purves and Beach, 1972, and Amatora and Edith, 1951). Still, this technique was used in several well-known studies such as those by Witty and others (1959), Norvell (1958), Shores (1953) and Wolfson (1960).

The interview technique is another popular method. Zimet (1966) found a large percent of studies used either questionnaires (or inventories) or interviews. An interview usually is done on a one-to-one basis with the examiner asking questions or presenting material to the subject. Purves and Beach (1972) have stated that the interview provided more in-depth information but was time consuming since it was done on an individual basis. Byers (1964) has questioned the validity of this method because subjects may state what they think will be approved by the adult examiner. The information may also be limited to the most recent reading and not provide long-range

information. This technique was used by Stanchfield (1962), Schotanus (1967)and Rankin and Thames (1968).

Studying library withdrawal records was used by Peterson (1971) with second graders, by Smith (1962) with first graders, by Meisel and Glass (1970) with fifth graders and by Karlin (1962) with grades three through nine. But this method checks only one source of reading material and is strongly influenced by the availability of books.

Young (1955) and Amatora and Edith (1951) mentioned children's own book records as useful tools for studying interests. Each child would keep a list of the books read during a specified length of time. This method would overcome the problem of a single source of reading material, but Purves and Beach (1972) wrote that a reading record would still be affected by the kinds of books available. An anecdotal record would have the advantage of providing long-range data and would reduce the problem of artificiality evident in a questionnaire or interview technique. This investigator, however, found no study that used this method.

Many recent studies have introduced new techniques. Ford and Koplyay (1968), for instance, used a non-verbal, picture preference test with kindergarten through third grade. Geeslin and Wilson (1970) had subjects choose between pairs of books. Butler (Wade, 1964) had second graders rate books read aloud by their teachers. Coleman and Jungeblut (1961) had fourth, fifth and sixth graders rate selections from trade books. Ashley (1970) had the same age group rank topics

for reading likes and dislikes. But all of these seemed closer to showing preference than interest as defined by Getzels.

Methods used with younger students

Until recently very few studies have used primary age children in their populations. As Zimet (1966) wrote, "Researchers have grossly neglected the reading interests of the very young child (p. 124)." This is probably true for several reasons. The beginning reader was thought to have very narrow interests favoring fantasy and fairy tales (Terman and Lima, 1928). The readability of trade books also limited young children to certain areas. Furthermore, it was difficult to test large populations of beginning readers who were not able to read or write well enough to fill out a questionnaire. In an interview situation, young children would probably be more apt to be influenced by the expectations of the examiner than older students (Ford and Koplyay, 1968). The research that was done with primary children experimented with various methods and produced varied data.

Byers (1964) was one researcher who felt more attention to the interests of primary graders was needed. To measure their interests, Byers tried taping the sharing periods of first graders. She found strong interest in science and nature, in possessions, in personal experiences and in family and home activities. Although verbal responses overcame the problem with writing, the relevance of this method is questionable. It was not reading interests that were being

measured. What children talk about and what they read about may not be the same.

Ruth Smith (1962) studied the library selections of first graders to compare the choices with stories in pre-primers and primers. She found humor-fantasy, real animals, nature-science, holidays-birthdays and fairy tales to be the highest ranking categories in that order. Byers' findings did not even include humor or fantasy which Smith's findings ranked first. Both investigators reported interest in science and nature. Yet, in analyzing basal reader content, Smith found no science or nature stories. The stories were primarily about parents, children, toys and play. Interestingly, Smith's analysis of the content of the readers more closely correlated with Byer's conclusions. Perhaps educators and publishers have been influenced by what young children talk about, not what they want to read about.

Peterson (1971) also used library withdrawal records along with interviews with second graders. He concluded that fantasy, fantasies about animals, fanciful humor and modern fantasies about people were popular. Despite the different titles to the categories, Peterson's findings did not include any factual books at all. This study certainly upheld fantasy as the prime reading interest of primary children.

Ford and Koplyay (1968) prepared a non-verbal test made up of pictures representing six interest categories. When given to students

in kindergarten to third grade, the test yielded the following choices: 1) Negro heritage, 2) children in the ghetto, 3) history and science, 4) children in general, 5) fantasy and 6) animals. The interest in the first two categories was unusual, but the test was a preference between pictures not free choice. Groff (1970) in his critique of this study questioned the validity of the story preference test since choices were limited. History was a selection not mentioned by Byers or Smith, but factual material rated high in this study. The ranking of fantasy after history and science suggested that primary children's interests may indeed be expanding.

Wade (1964) reported a study done by James Butler with second graders. He had teachers read twenty-four books from eight interest categories to their classes over a six month period and had the children rate them. In preliminary results, fantasy and fairy tales rated first and second, but science and nature rated low. This low rating conflicted with that of Byers, Smith and Ford and Koplyay. Yet, these factual categories do not lend themselves well to oral reading at this age. The high rating of fantasy did agree with Peterson's findings. The teachers' attitudes toward the books might have influenced the children's choices. Yet, Butler's study was not one of interest but preferences for the books that were read.

Just looking at these five studies the reader may agree with Weintraub (1969) when he said that the method affects the findings. It is difficult to make a general statement about a specific category of interest even at one grade level. Several ideas do appear that

are worth noting. Butler (Wade, 1964) stated that seven and eight year olds had broader interests than in former years. Byers (1964), Smith (1962) and Ford and Koplyay (1968) all presented results that indicate fantasy and fairy tales might not be the main interests of all primary children. There did seem to be an interest in factual material. These five studies also showed that interests of young children could be measured, although the reliability of the data as true indications of interest is questionable. Other techniques are still needed that will obtain useful and dependable information about the interests of primary age readers.

Some General Findings

As might be expected, the findings from more than three hundred studies provided a wealth of data on reading interests. Some of the findings agreed but many did not, even at the same grade level as was previously shown. An attempt has been made to analyze the data from some of the studies about the effect of grade (age), sex and reading ability or intelligence on interests in fiction and nonfiction and make some general statements that pertain to this study.

Grade. Since there was no study using the exact age range as this study, it was necessary to use a variety of studies covering the range from first to sixth grade. Several major studies provided data that related to the first null hypothesis which is concerned with a comparison of interest in nonfiction by grade.

Terman and Lima (1928) and Purves and Beach (1972) both stated that reading interests were marked by age levels. This was shown to be true in several reports. Peterson (1971), Harris (1970), King (1967) and Terman and Lima (1928) found that primary grade children showed greatest interest in fairy tales and fantasy. Harris (1970) and Purves and Beach (1972) noted a decrease in this interest in fantasy at third and fourth grade. King (1967) reported the intermediate grades preferred mystery, adventure, animal stories, family life stories, biography, sports, science and social studies. This change would also indicate that nonfiction does gain popularity with the increase of grade level to which Purves and Beach (1972) attested. Norvell (1958) substantiated the appeal of nonfiction in his findings that even as low as fourth grade children preferred the story that really happened to the fictional one.

Mackintosh (1957) and King (1967), on the other hand, felt that children mature more rapidly in reading interests than previously. Studies done by Smith (1962), Byers (1964) and Ford and Koplyay (1968) with primary children indicated that realistic stories were beginning to be popular with the lower grades as well. Actual reading interests found in several studies can be seen in Table 1. The reader can see that interests even on one grade level were varied. The popularity of nonfiction books should be noted. In fact, three of the studies listed the science-nature category third (Smith, 1962; Wolfson, 1960, and Ford and Koplyay, 1968).

TABLE 1

Categories in Rank Order of Interest
from Five Reading Interest Studies

Investigator:	Smith, R. D.	Byers, L.	Ford, R. D. and Koplyay, J.	Butler, J. (Wade)	Wolfson, B. S.	
Date:	1962	1964	1968	1964	1960	
Grade:	1	1	K-3	2	3-6	
Method:	Library withdrawals	Taped sharing	Picture preference test	Oral Reading by teacher	Interest Inventory	
Sex:	Both	Both	Both	Both	Boys	Girls
Fiction:						
Fantasy	1		5	1	6	1
Real animals	2		6	5	7	8
Holidays/birthday	4					
Fairy Tales	5			2		
Adventure	6		4		1	5
Mystery						
Poetry				3		7
Nonfiction:						
Nature	3	1		8		
Science	7		3		3	9
Personal Experience		3, 4		4		2
Other countries				6		
History			1, 3		5	3
Helpers		8				
Sports		5			2	4
Transportation	8				4	
Famous people				5		
Possessions		2				
Children in ghetto			2			

Sex. The second null hypothesis to be tested is comparing the amount of nonfiction read by boys with that read by girls. Sex had been found to be the most important determinant of reading interests by Wolfson (1960), Thorndike and Henry (1940), Norvell (1958) and Purves and Beach (1972). Harris (1970), Terman and Lima (1928) and Witty and his associates (1959) have stated, however, that sex differences in reading interests do not appear until age nine, at which time boys show preference for real life adventure and action, while girls prefer fairy tales, sentimental fiction and familiar and home-life experiences. But, a study by Butler (Wade, 1964) found sex differences at the second grade level, although fantasy was still the most popular category for that grade. Berry (1970) listed the following interests for first grade boys: Outdoor life, explorations and expeditions, sports and games, science fiction, sea adventures, tales of fantasy, historical fiction and adventures of boys.

This list certainly shows a wider range of interests than Norvell's or Terman and Lima's. This broader range of interests was also attested to by Wolfson (1960) and Amatora and Edith (1951). Berry's list also indicated an interest in some nonfiction categories. Shores (1953), King (1967) and Terman and Lima (1928) have stated that boys in the intermediate grades do read more nonfiction than girls. But Berry (1970), Smith (1962), Wolfson (1960) and Ford and Koplyay (1968) showed that this interest in nonfiction appeared even in the primary grades. If fantasy and family life are not the

main interests of primary age boys, the criticisms of Stanchfield (1962), Norvell (1958) and Smith (1962) about the lack of appeal of primary reading texts for boys should be taken more seriously.

Ability or intelligence. The third null hypothesis is concerned with a comparison of the amount of nonfiction read by those scoring at or above the mean on a standardized reading test and by those scoring below the mean on the same test in the combined grade levels. Thorndike and Henry (1940), Witty and his associates (1959), Geeslin and Wilson (1972) and Droney, Cucchiara and Scipione (1953) all stated that superior, average and slow pupils usually enjoyed the same kinds of reading material. Stanchfield (1962), Zimet (1966) and Norvell (1958) concluded that age and maturity rather than intelligence influenced interests. Norvell (1958) and Terman and Lima (1928) did write that the gifted read more and read more widely and Harris (1970) and Purves and Beach (1972) have claimed that the gifted mature earlier in interests. In contrast, King (1970) found that slow learners were slightly immature in reading interests. But this is a function of maturity not necessarily ability. Reading ability or intelligence do not seem to influence interests more than chronological age (Geeslin and Wilson, 1972).

To summarize, the data from available interest studies generally supported the results expected by the investigator. The amount of nonfiction read had been found in some studies to increase with grade. Since interest in nonfiction had appeared as low as first grade, the first null hypothesis should be rejected. Boys have been

said to have a greater interest in nonfiction than girls even in the lower grades. Thus, the second null hypothesis should also be rejected. Neither reading ability nor intelligence has been shown to affect interests more than chronological age in most studies. The amount of nonfiction read by the upper and lower scorers on a standardized test should not be significantly different and the third null hypothesis should be accepted. The reasons for the limited content of primary material and the importance of considering the use of more nonfiction in children's reading will be discussed in the next section.

Limited Interest Content of Primary Material

Ruth Strickland (1957) wrote, "Interests expand and grow when there is opportunity to live with them and material for them to feed on (P. 138)." It's questionable whether instructional materials and many of the trade books that are used in most schools are providing sufficient opportunity for interests to grow. Helen Mackintosh (1957) felt that they were not. She stated, "Something must be done to inject into materials at the primary level more of the qualities that children demand (p. 143)." Bond and Wagner (1950) felt that schools were not making a wholehearted attack on developing interests in reading.

Basals and trade books. In support of Mackintosh's statement, a study done by Condit (Zimet, 1966) revealed that in examining the readability of 759 trade books purported to be suitable for reading

by normal first and second graders, only 151 of the books were appropriate in interest. Likewise, Byers (1964), Smith (1962), Ford and Koplyay (1968) and Meisel and Glass (1970) all compared free choice reading interests to basal reader content, but at different grade levels. All of them concluded that the basals in general covered a very narrow range of interests and did not present the kinds of stories children liked best. For example, Smith (1962) compared first grade basal readers to library selections and found a narrower span of reading interests in the basals. Those stories that did appeal to young readers were not represented in the same proportion shown in their free choice reading. Bond and Wagner (1950) wrote that it had been a tendency to use story material to the exclusion of other types in basals making a very narrow range of interests. In fact, Ford and Koplyay (1968), in a brief analysis of basals for primary grades, found that they contained stories for which children in their study expressed a dislike. Johnson (1970) went so far as to comment that present instructional materials for reading were 95% effective in killing interests.

Boys' interests. Several researchers stated that boys' interests in particular were not being met by basals. Byers (1964), in a study with first graders, found boys needed more stories of outdoor activity and also with father-son relationships. Stanchfield (1962) stated that some of the trade books and stories in basals, especially at the primary level, not only do not motivate boys but actually

alienate their reading interests. Norvell (1958) wrote that sex was so strong a factor in reading interests that any material used in mixed classes should be carefully checked for interest by both girls and boys. Droney, Cucchiara and Scipione (1953) suggested basals should eliminate stories with predominantly feminine characters, since boys would not read girls' books but girls would read boys' books.

Factors affecting interest content. Frank (1957), Mackintosh (1957), Larrick (1961) and Ford and Koplyay (1968) have each stated that the mass media have done much to broaden children's interests and excite curiosity in recent years. TV in particular has had a strong influence on reading (Witty, 1964, and Ford and Koplyay, 1968). It has brought new knowledge and added to vocabulary. But TV also competes with books for children's time and seems to be winning. Books do not offer the action and variety of TV. Likewise, space travel and the increased mobility of the population have created in children a greater awareness and curiosity about the world and the universe beyond that have not been satisfactorily met in books from the younger child's standpoint (Mackintosh, 1957).

Adult expectations also may be responsible for the limited content. Older studies on interests by Norvell (1958) and Terman and Lima (1928) credited primary children with interests centered around fantasy and fairy tales. These interests have been broadened as shown by the studies previously cited, but adults still seem to

expect younger children to prefer this type of story. Basal reader content and the books displayed for primary children in libraries and classrooms substantiate this. Bond and Wagner (1950) agreed that it was assumed that the development of interests and tastes was limited to reading fiction. Getzels (1966) commented that "although the expectation that children will be interested may not make them interested, the teacher's (or other adult's) expectation that they will not be interested surely creates the likelihood of a self-fulfilling prophecy: the pupils will live up to expectation not to be interested (p. 104)."

The effect of adult expectation was best described by Nancy Larrick (1961) when she wrote, "Impatience and a tendency to underrate youth's capacity to understand have led to attitudes and reading materials which dampen and squelch the natural incentive to read (p. 191)." Since children are limited to the kinds of books adults will write, publish and buy for them, adults must be sure their choices agree with the children's choices. The contradiction between free choice reading selections and basal content, already pointed out, shows a definite need for adults to reconsider the kinds of stories that should be available to younger children.

The Pros and Cons for Nonfiction in Primary Reading

In searching for stories that meet a wider range of interests, a clue should be taken from the work of Smith (1962), Wolfson (1960), Norvell (1958), Mackintosh (1957), Shores (1953), Byers (1964),

Stanchfield (1962) and Ford and Koplyay (1968) who have found evidence that nonfiction categories rate quite highly in children's interests. Shores (1953) in studying grades four through eight, Smith (1962) in studying grade one and Byers (1964) in studying grade one all found strong interest in science and nature. Smith (1962) and Mackintosh (1957) noted an interest in real animals in the lower grades. Ford and Koplyay (1968) found interest in history and science in kindergarten through grade three. Berry (1970) and Stanchfield (1962) found boys even in grade one up to grade eight keen on outdoor life, explorations and expeditions and sports. Both Norvell (1958) and Mackintosh (1957) reported a strong interest in factual information in general in elementary age children. Yet, nonfiction has not been used in basals or trade books to a great extent for the lower grades (Meisel and Glass, 1970). Nonfiction may have been neglected for several reasons.

Literary style. Purves and Beach (1972) wrote that over twenty-five studies showed children had a preference for a literary style. Since information books are not considered creative (Fischer, 1972), these books are reviewed for their content not their literary value. Nonfiction is considered primarily for reference while fiction is for enjoyment and enrichment. Yet, Peller (1970) stated that "Much that is presented to children as 'stories' is, in fact, very thin fiction (p. 23)." She felt that this kind of fiction was not literature either. Thus, fiction is not serving the desired purpose of

enrichment. Norvell (1958) agreed that a large part of the literary material presented in schools was not even suitable from an interest standpoint. Peller (1970) wrote that education would be better served if accurate, well-written factual material was used. If more care was taken in providing a story line (Harris, 1970), nonfiction could meet the challenge and provide enrichment and literary style as well as knowledge.

Vocabulary. Another problem with nonfiction is the difficult vocabulary needed in factual stories. Betts (Schotanus, 1967) felt that children should not encounter problems of word recognition or comprehension in pleasure or information reading. But, Schotanus (1967) concluded in her study that factors other than difficulty of material formed children's attitude toward books. Fischer (1972) agreed that terminology need not be daunting to young readers. In fact, Larrick felt that readability should be clear but not over-simplified. Readability formulas do not consider that the author's style and organization might affect readability (Marksheffel, 1968). Furthermore, Hunt (1970), Fleming (1967), Byers (1964), Barbe (1963) and Estes and Vaughn (1973) all stated that interest could overcome difficult readability and even increase comprehension. In their particular study, Estes and Vaughn (1973) found that interest was able to increase comprehension even with material above the subject's instructional reading level. With the extra incentive that interest can give, nonfiction should not be excluded from primary books on

vocabulary alone. As Zimet (1966) wrote, "...the communication and knowledge explosion of recent years makes obsolete our concept of vocabulary control and readability formulas (p. 126)."

Adequate facts. The presentation of adequate and accurate facts has also been a drawback to using nonfiction. Larrick (1961) found science books for children "inaccurate, guilty of serious omissions and distorted (p. 192)." She required of nonfiction complete accuracy in text and illustration. Nonfiction books for younger students would have to be simplified and the concepts limited, but the books could and should still include interesting and well-presented facts. Bond and Wagner (1950) stated that children liked to attack problems of everyday living and were willing to put forth the effort to understand.

Skill development. Terry Johnson (1970) has presented a strong argument in favor of the use of more factual material in the primary grades. She wrote that educators are trying to teach children to read critically with narrative material, which is primarily fictional, that does not lend itself as well to critical reading as does expository material, which is often factual. Cooper (1968) agreed that typical basal readers were not particularly suitable for teaching many of the study skills. Johnson (1970) estimated that sixty percent of the reading skills in this area were best taught with expository material, but that most reading texts, especially in the

third and fourth grades where skills should be developing, were predominantly narrative. Harris (1972) also mentioned the importance of factual material in developing basic study skills. In appraising basals, he noted that nonfiction was just appearing in intermediate grade basals. Bond and Wagner (1950) felt that skills should be developed as part of the total program not in isolation even in the primary grades. Johnson (1972) affirmed that factual expository material would provide a better transfer from the reading lessons to the content readers. Perhaps educators are not only failing to meet the reading interests of young readers by stressing fictional material, but are also making the acquisition of reading skills more difficult.

Expanding interests. The heavy concentration of fiction in the primary grades also prevents interests from expanding to other areas. Olsen (1968) commented that "relatively few materials designed for the reading program in the early grades present guides to stimulate wide outside reading (p. 135)." Bond and Wagner (1950) felt that content readers for the primary grades should be part of the reading instruction as they are in the intermediate grades. They stated that "the early introduction to content readers lays the foundation for differentiation and specificity of reading which is not only desirable but necessary as the child progresses through the curriculum (p. 199)." Bond and Wagner (1950) concluded that where efforts were taken to include nonfiction, the desire to read factual

material grew rapidly. Interest for factual material cannot grow if it is never encouraged.

Since interest and reading competency are related (Meisel and Glass, 1970), reading interests should be studied carefully. If nonfiction can stir interest and improve skills, it should receive a more prominent place in primary books. The increasing interest in nonfiction has been shown by Kujoth (1973) in her listing of the best-selling children's books. She found the ratio of nonfiction to fiction to be increasing rather steadily year by year in recent times. In fact, in 1966 only nine fiction books rated as best-sellers (selling 100,000 copies or more) compared to twenty-eight nonfiction books. While in 1956 the ratio was listed as nine fiction books to only four nonfiction books.

This study has attempted to find out more about the status of nonfiction books in the reading interests of lower elementary grade students. A description of the procedure and the design of the study follows in the next chapter.

Chapter 3

METHOD

A review of the available literature on research of reading interests revealed that a limited number of studies had been done with the lower elementary grades, that each study that was done used a different procedure and that the results were varied and difficult to compare. To prepare this study, it was necessary to select the method that would be appropriate for this age and yield sufficient and worthwhile data on the kinds of books read.

Studying library withdrawal records, a common method, would not show if the book was actually read and would not include books obtained from other sources. Personal interviews, another popular method, would have been very time consuming for a large population and would not yield long-range information. A questionnaire seemed too artificial and difficult to use with this age group. Ford and Koplyay's (1967) nonverbal method previously mentioned was a new way of overcoming written inventories for younger students, but it indicated preference not actual selection of books. Byer's (1964) method of taping sharing periods was not actual book selection either. Thus, it was decided to use an individual record sheet for listing books read during a three month interval. This method would give a longer time span for measuring interests, would include books from a variety

of sources and would be a measure of actual book selection. The rest of the chapter is devoted to the description of this tool, the population, the general procedure and the statistical design.

The Personal Reading Record

Although an anecdotal record was considered a conventional method of finding out what children read, it was not used in any of the studies that were reviewed. The investigator wanted to find out if this method would prove to be a practical one for measuring reading interests of younger students as well as provide the desired information on nonfiction material.

A sheet was prepared by the investigator that would provide an easy recording system for the younger students who were taking part in this study, yet would give sufficient information. A sheet was sectioned off to allow space for the information in the following order: title, author, kind of book (fiction or nonfiction), where they obtained the book, whether they read the entire book and their rating of it. The information from the two latter questions was not included in the results. These questions were added to help the student and the teacher in analyzing reading likes and dislikes.

Except for title and author which had to be written in, the questions were answered by circling the appropriate word or abbreviation for words (See Appendix A). Abbreviations were used because of limited space. Explanations for the abbreviations were given

orally and were also written on the inside cover of the folder in which the sheets for each class were kept. The meanings of the abbreviations can be seen in the appendix.

Each child was requested to list the books that he read by title and author. Then he answered the questions about the book. Each sheet had space for six books, but additional sheets could be attached. A child could list as many books as he wanted during the three month period, but he was encouraged not to write down books he had not actually read. It was expected that in some cases the books were not read but only listed to fill up the sheet. The investigator felt, however, that the majority of the students kept a fairly accurate record of their reading.

The Reading Tests

The students in the three grades had been tested on achievement batteries two months prior to the introduction of the personal reading records. Second graders took Form 12B of the Cooperative Primary Tests (1967). Third graders took Form 13B of the same test. Fourth graders took Form A of the Sequential Tests of Educational Progress (1970). Both tests are published by the Educational Testing Service of Princeton, New Jersey. The reading scores from these tests were used as an indication of reading ability needed to test the third hypothesis. Since only two general groupings were needed, this testing information seemed sufficient. So many of the

students scored above the national mean on all three tests, that it was necessary to compute a local mean for each test to provide an adequate sampling for both of the two desired groupings.

The Availability of Books

Since the study depended on the availability of books, a brief discussion of possible sources for obtaining books is necessary. A county library, recently relocated in a new building about ten miles from the school, is the only public library available to the students. It has a children's section with an adequate sampling of books that continually increases as money becomes available. However, the library is not well-used. The county library also sponsors a bookmobile that visits each township. The school itself has a separate library with a fulltime aide. At last count the library had 1,179 fiction books and 1,591 nonfiction books on hand. Books are also supplied from the county library three times a year to supplement the school's collection. Each class has the use of the school library twice a week for half an hour. Most students are allowed to borrow two books for a week's time.

Each of the classrooms occupied by the students in the study has its own library varying as to number and kind of books, but they are primarily paperbacks. Many of the students had the opportunity to purchase books through the Scholastic Book Club on a class basis, usually once a month. Many of the children also had their own home libraries.

The Community Setting

The subjects were all residents of Readington Township, New Jersey. Readington is a rural community located in Hunterdon County. It is 47.8 square miles in size and had a population of 7,688 as of the 1970 Census, but it was predicted to have 8,000 by 1972 due to recent housing projects. The average family income was $13,502, also according to the 1970 Census, making it a middle class area. Housing is almost exclusively one-family dwellings due to municipal ordinances. There are no towns, only four small villages, within the township boundaries. A 20% sampling of males and females twenty-five or over in 1970 indicated that the majority of the population were high school graduates with about 20% of them receiving at least some college education. The area is predominantly Caucasian.

There are two elementary schools that are both kindergarten through fourth grade and a middle school that is fifth through eight grade located in the township. After eighth grade students attend a large regional high school. The students for this study were from the Three Bridges Elementary School.

The Population of the Study

The Three Bridges School, a K-4 school, had at this writing an enrollment of 328 students distributed into four kindergarten sessions, three classes of first, second, third and fourth grade and a small class of Educable children. The classes are all

heterogeneously grouped except for the Educable class of course. Forty second graders with an average IQ of 113, forty third graders with an average IQ of 111 and forty fourth graders with an average IQ of 112 were selected for a total of one hundred twenty students in the study. A stratified random sampling was done to get an equivalent number of boys and girls at or above grade level and boys and girls below grade level in reading at each grade. The age range was from seven to ten years of age.

The Procedure

The study was carried out in the school where the investigator was a second grade teacher. The decision to use this school was made for several reasons. Being familiar with the school, the investigator knew of the availability of books vital for this study. Since the study relied on personal records, it was necessary to check on the progress of the records often to be sure the students were being accurate. Knowing and being known by the faculty and students helped the investigator obtain full cooperation and encourage continued use of the reading records for the three month period.

The Reading Record. With the permission of the school principal, a meeting was held with the other eight teachers whose classes were to be used in the study. The investigator explained the purpose and design of the study and obtained their cooperation in the project. Times were arranged for the investigator to visit each of the classes for thirty minutes to discuss the project with their students.

The teachers were asked to help by discouraging students from writing down books not actually read and by reminding students to be accurate with the record. Their assistance was also needed in some cases in helping the children determine the kind of book they were recording.

To prevent bias that might arise from using only a few students in each class, the book record was given to the entire class. The sampling was not done until after the sheets were collected. In this way none of the teachers, including the examiner, knew which of the students would be included in the study. Consequently, the teachers would not be tempted to influence particular students.

Over a period of three days in early December, the investigator visited each of the nine classrooms. Each class was told that the investigator wanted to learn more about the kinds of books children read. They were asked to help by keeping a record of the books they read in their free time. Each student received a copy of the reading record sheet to fill out name, grade and teacher. An explanation was then given on filling out the rest of the sheet. A short discussion on the difference between fiction and nonfiction was held to be sure that they understood the terms. The students were told how to distinguish between the two kinds with the help of the library classification system if it was a library book. The children were told to ask their teacher, the librarian or the investigator if they were in doubt. The classes were asked to record each book they read starting from that day until the sheets were

collected in twelve weeks. The sheets were to be kept collectively in a folder in the classroom so that they would not be lost. The key to the abbreviations used on the sheet was on the inside cover of this folder. Since only six books could be listed on one sheet, extra copies were also put in the folder for future use.

At the end of the twelve weeks the investigator collected each folder. The total population was then randomized as described in the next section. The reading scores on the standardized tests were obtained at this time to identify the high and low scorers for the sample.

Analysis of Data

Design of the study. The study was a survey attempting to obtain information about the reading interests of second, third and fourth graders. The information was collected by providing each child in the study population with an individual reading record sheet. No control group was used and no special treatment was given. The reading record was kept on books that were part of the child's normal reading habit. The total population of the second, third and fourth grades kept the records. But, a stratified random pattern was used to select a sample population after the reading records were

collected as previously mentioned. The pattern was as follows:

		Grade 2	Grade 3	Grade 4
At or above - mean	Boys	10	10	10
	Girls	10	10	10
Below mean -	Boys	10	10	10
	Girls	10	10	10
		40	40	40

Statistical analysis. The main statistical analysis was concerned with the comparisons of percents of nonfiction read for the variables of grade, sex and reading ability. The percent of nonfiction books of the total number of books read by each subject was calculated from the personal reading records. To test the first hypothesis a frequency count of the percents was taken for each grade. The frequencies were grouped into five categories to cover the range from 0 to 100%. A table of actual and expected frequencies was made and a chi square test was done on the data. The .05 level of significance was required to reject the null hypothesis.

To test the second hypothesis the individual percents of nonfiction were grouped by sex. A frequency count was done for total boys and total girls and another table constructed. The chi square test was again used with .05 as the level of significance for rejection.

The third hypothesis was tested in the same manner except that the percents of nonfiction were regrouped by the reader's

ability--those at or above the local mean on the standardized test and those below the local mean on the test. The chi square test was the statistical tool used. The .05 level of significance was again required.

Mean percents by grade, sex and reading ability were also calculated to give another comparison. No statistical test was made, but the means were not used to test the hypothesis.

The reading records were then used to answer the secondary questions. To determine the average number of books read by grade, sex and reading ability per month, individual totals were added within the groups of the stratified pattern shown on the previous page. The average number of books read by grade, sex and reading ability were then calculated. Each of the three averages was divided by three, which was the number of months, to get the average number of books read per month for each variable.

To find the usage of each of the sources for books, a frequency count was taken on the source of each book listed on each record sheet. The total was found for each source which was divided by the grand total of books to get a percent of usage.

The third problem was concerned with the most popular nonfiction categories by sex. A list of categories was made and a frequency count taken for the nonfiction books read by the boys in each category. The same was done for the nonfiction books read by the

girls. A frequency table was prepared to show the categories of greatest interest for each sex.

The results of the study are reported in Chapter 4 in written and table form.

Chapter 4

RESULTS AND DISCUSSION

This chapter presents an analysis of the data in light of the questions raised in Chapter 1 and a discussion of the results follows.

Results

Hypothesis 1. Table 2 indicates the expected and actual frequencies of the percents of nonfiction read by grade. No specific pattern appears between the actual and expected frequencies at any of the three grade levels. In most of the blocks the differences are slight. The total column reflects the high number of students who read no or very little nonfiction. Two other high numbers show a cluster at the 15-29 percent level and at the over 44 percent level. This clustering indicates that the status of nonfiction varied considerably with individuals.

A chi square test for k independent samples was computed from the frequency table. The observed value of chi square was .20. Thus, the hypothesis was not rejected at the .05 level of significance. There was no statistical difference in the amount of nonfiction read by second graders, by third graders and by fourth graders. Table 3, however, shows that the mean percent for grade two was 21.7 percent, for grade three 22.8 percent and for grade four 23.7 percent. There was a slight increase in the percent of nonfiction as the grade increased. These mean percents also showed that an average of one fifth of the books read by each grade was nonfiction.

TABLE 2

COMPARISON OF THE EXPECTED AND ACTUAL FREQUENCIES OF THE PERCENTS OF NONFICTION BOOKS READ BY STUDENTS IN GRADES TWO, THREE AND FOUR

Percents of nonfiction read		Grades			
		Second N = 40	Third N = 40	Fourth N = 40	Total N = 120
0-4%	expected	14.7	14.7	14.7	44
	actual	11.0	18.0	15.0	
5-14%	expected	5.0	5.0	5.0	15
	actual	7.0	3.0	5.0	
15-29%	expected	9.0	9.0	9.0	27
	actual	14.0	7.0	6.0	
30-44%	expected	4.0	4.0	4.0	12
	actual	1.0	4.0	7.0	
over 44%	expected	7.3	7.3	7.3	22
	actual	7.0	8.0	7.0	

df = 8

$x^2 = 11.97$

observed value of $x^2 = .20$*

* not significant

TABLE 3

MEAN PERCENTS OF NONFICTION BOOKS
READ BY GRADE, SEX AND READING ABILITY

Reading Ability	Sex	Grade 2	Grade 3	Grade 4	Mean % Ability
Below mean	Girls*	14.5%	15.5%	22.2%	24.9%
	Boys**	32.9%	38.2%	26.2%	
At or above mean	Girls*	10.9%	15.8%	18.3%	20.5%
	Boys**	28.4%	21.5%	28.0%	
Mean percent by grade		21.7%	22.8%	23.7%	

* Mean percent for all girls = 16.2%

**Mean percent for all boys = 29.2%

Hypothesis 2. Table 4 presents the expected and actual frequencies for the percent of nonfiction read by each sex. The actual frequencies for boys were below the expected frequencies for all levels except over 44 percent. Girls' actual frequencies were above the expected for all levels except over 44 percent.

A chi square test for two independent samples was computed. The observed value of chi square was .08. Although this was not significant at the .05 level, the chi square value did approach significance. It is necessary, however, to accept the null hypothesis. There was no statistical difference between the amount of nonfiction read by boys and that read by girls.

Table 3 indicates that the mean percent for girls was 16.2 percent. The mean percent for boys was 29.2 percent. This was a difference of 13 percentage points. The boys did read more nonfiction than girls in this comparison. It is interesting to note that third grade boys below the local mean in reading had the highest percent of nonfiction for boys, but third grade boys at or above the local mean had the lowest percent for boys. The girls had a more consistent pattern. Their percents increased slightly with grade especially for those girls at or above the local mean in reading.

TABLE 4

COMPARISON OF THE EXPECTED AND ACTUAL FREQUENCIES OF PERCENTS OF NONFICTION BOOKS READ BY BOTH SEXES

Percents of nonfiction read		Boys N = 60	Girls N = 60	Total N = 120
0-4%	expected	22.0	22.0	44
	actual	20.0	24.0	
5-14%	expected	7.5	7.5	15
	actual	6.0	9.0	
15-29%	expected	13.5	13.5	27
	actual	12.0	15.0	
30-44%	expected	6.0	6.0	12
	actual	5.0	7.0	
over 44%	expected	11.0	11.0	22
	actual	17.0	5.0	

df = 4

$x^2 = 6.84$

observed value of $x^2 = .08$*

* not significant

Hypothesis 3. Table 5 shows the expected and actual frequencies for the percent of nonfiction read by those scoring at or above the local mean on a standardized reading test and those scoring below the local mean. The local mean for second grade was a standard score of 143 (73rd percentile) on Form 12B of the Cooperative Primary Tests (1967). The local mean for third grade was a standard score of 158 (75th percentile) on Form 13B of the Cooperative Primary Tests (1967). The fourth grade mean was a standard score of 424.9 (68th percentile) on Form A of the Sequential Tests of Educational Progress (1970). There was no outstanding characteristic pattern for the expected and actual frequencies, except that more students below the local mean fell at the over 44 percent level than was expected.

A chi square test for two independent samples produced an observed value for chi square of .85. This was not significant at the .05 level of confidence. Thus, the third null hypothesis was also accepted. There was no statistical difference between the amount of nonfiction read by those scoring at or above the local mean and those scoring below it. Reading ability did not significantly affect the amount of nonfiction read.

The mean percents for reading ability shown on Table 3 indicate that girls below level in second and fourth grade did read slightly more nonfiction than those girls at or above level. Third grade girls read about the same percent above and below the mean. Boys below the mean in second and especially in third grade read more

TABLE 5

COMPARISON OF THE EXPECTED AND ACTUAL FREQUENCIES OF PERCENTS OF NONFICTION BOOKS READ BY STUDENTS SCORING ABOVE OR BELOW THE LOCAL MEAN*

Percents of nonfiction read		Students scoring at or above mean N = 60	Students scoring below mean N = 60	Total N = 120
0-4%	expected	22.0	22.0	44
	actual	23.0	21.0	
5-14%	expected	7.5	7.5	15
	actual	9.0	9.0	
15-29%	expected	13.5	13.5	27
	actual	13.0	13.5	
30-44%	expected	6.0	6.0	12
	actual	6.0	6.0	
over 44%	expected	11.0	11.0	22
	actual	9.0	13.0	

* Local means were taken from Standardized Reading Tests.

df = 4

$x^2 = 1.46$

observed value of $x^2 = .85$**

** not significant

nonfiction than those boys above the mean in the same grades. Only fourth grade boys below the mean read less nonfiction than their counterparts above the mean. The total for all those below the local mean was a mean percent of 24.9. All those at or above the local mean had a mean percent of 20.5. Although not statistically significant, the difference of the means suggests that these boys and girls below grade level in reading may have slightly more interest in reading nonfiction. An average of almost one fourth of their books were nonfiction.

Discussion

Grade. The investigator's premise that there would be an increase in the percent of nonfiction read as grade increased did not prove to be true. The mean percent of nonfiction read by each grade did reveal a slight increase with grade, but this was not significant statistically. But, more important, an interest in factual material did appear in the lower grades. This interest in nonfiction agreed with the findings of Byers (1964), Smith (1962) and Ford and Koplyay (1968). Fiction still ranks higher in children's interests, however. In fact, individual percents showed that 37 percent of the children read no nonfiction at all. On the other hand, 63 percent of the children read at least one nonfiction book in three months. Educators should consider using more nonfiction in primary reading instruction since interest in factual books does

exist. Fiction need not be the only material in primary basals if reading interests are considered.

Sex. The statistical analysis by sex did not prove boys read significantly more nonfiction than girls, but the value of chi square was quite close to the desired level of significance. The mean percents for boys and girls did show that boys in general read more nonfiction. Furthermore, sex differences did appear earlier than age 8 or 9 as stated by Harris (1970). These results also agreed with Thorndike and Henry's (1940) statement that sex was the most influential factor in reading interests even in second grade. Basals that are predominantly fiction may tend to alienate boys' interests more than girls'. Stanchfield (1962) attested to this.

Reading ability. Reading ability was not expected to affect the amount of nonfiction read in these three grades. Geeslin and Wilson (1972) wrote that there was no evidence in their study to show reading age influenced interests more than chronological age. This statement was upheld by the data of this study. There was a slight difference in the mean percents of those at or above the local mean in reading and those below it in favor of the latter group. Boys in second and third grade who were below the mean showed a greater interest in nonfiction than any other group. An average of almost one third of the reading done by the second grade boys below level and an average of more than one third of the

reading done by third grade boys below level was nonfiction. This could serve as a clue to the kind of material that could be used to motivate boys that are below level in reading.

Secondary Problems

Table 6 shows the average number of books read per month by grade, sex and reading ability. At all levels but one, girls read slightly more per month than boys. Only those girls in fourth grade below the local mean in reading read less books than their male counterparts, but the difference was slight. Generally those above the mean tended to read slightly more books than those below the mean. Second graders tended to read more than third or fourth graders. This fact is probably due to the shorter length of books intended for second graders. Third graders had the lowest average number of books per month. The reason for this is not known. This data did not verify the claim of Witty and his associates (1959) that the amount of reading increased with grade.

The second problem was concerned with the main sources of books for this population. The school library proved to be the chief source of books. More than half of the books, 58.7 percent, came from the school library (See Table 7). The class library was the next highest at 17.7 percent. For this sample at least, the content of the school library had the strongest influence on reading choices. It is important that the books in the school library be representative of the children's reading interests. School librarians should

TABLE 6

AVERAGE NUMBER OF BOOKS READ PER MONTH
BY GRADE, SEX AND READING ABILITY

Reading Ability	Sex	Grade 2	Grade 3	Grade 4	Av. by Ability
At or above mean	Girls*	5.1	3.0	3.3	3.5
	Boys**	4.1	2.1	3.2	
Below mean	Girls*	3.7	2.6	2.0	2.4
	Boys**	2.6	1.2	2.2	
Grade average per month		3.9	2.2	2.7	

* Girls' average number of books per month = 3.3
** Boys' average number of books per month = 2.6

TABLE 7

PERCENT OF BOOKS OBTAINED FROM THE SIX SOURCES

Sources	Percent of books
School Library	58.8%
Class Library	17.2%
Hunterdon County Library	4.7%
Book Club	6.3%
Gift	5.3%
Other sources	7.6%

be aware of the interests of the students in their schools and try to provide for these interests.

In analyzing the most popular nonfiction categories, certain trends appeared. Boys' favorites were: 1) animals, 2) transportation, 3) sports, 4) general science and 5) biography and geography tied. Girls' favorites were: 1) animals, 2) biography, 3) crafts and health tied, 4) sports and holidays tied and 5) nature. (See Table 8). For both boys and girls animals were the outstanding favorite. Byers (1964) and Mackintosh (1957) both reported a high interest in animals in their studies. Mackintosh (1957) also mentioned the interest in transportation that appeared in the boys' favorites. Sex differences were apparent as mentioned by Butler (Luckenbill, 1972) as low as second grade, at least in nonfiction choices. It is interesting to note in Table 8, that the boys read more books in each of their top five categories than the girls did. Boys' interests in nonfiction seem to be more distinct than girls' interests. This finding suggests that nonfiction material might provide important motivation for reading for primary age boys.

Summary

All three of the null hypotheses were accepted. The mean percents for nonfiction that were calculated for grade, sex and reading ability did show that sex had the greater influence on the amount of nonfiction that was read. The mean percents also revealed that a

TABLE 8

FREQUENCY OF INTEREST IN NONFICTION CATEGORIES BY SEX

Categories	Boys Frequency	Boys Rating	Girls Frequency	Girls Rating
Crafts and Hobbies	2		5	3rd
Holidays	1		4	4th
Transportation	18	2nd	0	
Communication	0		2	
Government				
Community	2		2	
Armed Forces	2		0	
Geography	7	5th	1	
Biography	7	5th	9	
History				
Indians	4		0	
American	3		2	
European	1		1	
Mathematics	0		1	
Health	0		5	3rd
Science				
General	11	4th	0	
Astronomy	1		1	
Weather	2		0	
Nature				
General	0		3	5th
Plants	0		2	
Animals	35	1st	32	1st
Dinosaurs	4		0	
Sports	13	3rd	4	4th
Total	123 books		74 books	

fair portion of primary children's reading is nonfiction. Girls read slightly more books per month than boys. Those who scored above the local mean on the standardized reading tests tended to read more than those who scored below the mean. Second graders read slightly more books per month than the other two grades. The school library was the chief source of reading choices. Both boys and girls indicated animal books as their most popular choice in nonfiction, but then the favorites differed after the first choice.

The next chapter presents a summary of the study, the investigator's conclusions and suggestions for further research.

Chapter 5

SUMMARY AND CONCLUSIONS

The purpose of this study was three-fold. The first was to learn more about the status of nonfiction in the reading interests of lower grade students. It was shown that nonfiction did rate in the reading interests of the young students in this sample, especially boys. The second purpose was to learn more about the reading habits of primary students. Some interesting findings were obtained. The third purpose was to try the personal reading record as a method of measuring reading interests. The investigator found this method to be a worthwhile and fairly dependable tool for collecting data on interests. The teachers involved in this study felt the records were kept accurately by most students. The record provided long-range information on specific books which were chosen by the subjects. The investigator felt that this method produced information which was closer to the true interests of the students than the interview or questionnaire technique would have provided.

The study used a population of the Three Bridges Elementary School in Readington Township, New Jersey. Although all students in the second, third and fourth grades kept personal reading records, only a sample of one hundred and twenty students selected by a stratified random pattern was actually used in analyzing data. The personal reading records were kept by individuals for three months and included any books read in their free time during that period. The sheets provided places for listing title, author, source

of book, kind (fiction or nonfiction), how much of the book was read and the rating of the book.

The main statistical analysis was concerned with what percentage of the children's reading was nonfiction. Data was analyzed by sex, grade and reading ability. The chi square for independent samples was the statistical tool used to test all three of the null hypotheses.

It was found that the amount of nonfiction did not increase significantly as grade increased, but an average of more than one fifth of the reading at each grade level was nonfiction. Although statistically boys did not read more nonfiction than girls, the mean percents that were also calculated by sex revealed that boys had a greater interest in nonfiction. Reading ability was also shown to have no effect on the amount of nonfiction read, but those below the local mean on the reading sections of a standardized test did show slightly more interest in factual books. Sex was the most influential factor in reading interests for nonfiction.

For this population, the school library was the source used most often. More than half of all the books listed came from the school library. In general, girls read more books than boys, those above grade level in reading tend to read more books than those below grade level and second graders read slightly more books than the other two grades. In analyzing the favorite nonfiction categories, animals rated highest with boys and girls. Then the rest of the choices differed for each sex.

Conclusions

Despite the limited population and in spite of the influence the availability of books may have had, some general conclusions can be drawn.

The results of this study suggest that nonfiction books do have a place in the reading interests of younger students as low as second grade. Although many individuals did not read any nonfiction, there were other individuals who read more nonfiction than fiction. An average of one fifth of the books read at each grade level was nonfiction. Educators and publishers should make attempts to provide more nonfiction stories in primary materials and more nonfiction books for independent reading at a lower readability to meet and expand these interests for factual reading matter. Gray (Zimet, 1966) commented that as attention was given to preparation and use of informational reading material for younger students the amount of such reading would increase. Such material would also prepare students for reading in the various subject areas in the upper grades.

The findings also indicated that reading instruction even in the primary grades should consider sex differences. Sex differences were at least as, if not more, influential than ability differences in reading interests. Although not statistically significant, the data indicated that boys, especially those below grade level in reading, included a fair portion of nonfiction books in their reading choices. Basals in current use seem to present primarily

fiction in the lower grades (Harris, 1972). Even primary age girls showed some interest in nonfiction. A better balance of fiction and nonfiction in instructional material is indicated. More nonfiction could also put more boy appeal into basals. Since boys experience more reading difficulties than girls, their interests should be an important concern.

Reading ability was not shown to affect interests in nonfiction very much. Judging by the difficulty of the various books appearing on the reading records, readability did not seem as important as content. This suggests that content should not necessarily be limited to maintain low readability. Publishers of children's books should consider nonfiction books for primary graders with controlled vocabulary but with adequate factual presentation.

Teachers and the school librarian should be sure a good variety of nonfiction, especially animal books, is available. For this sample at least, the school library was the principal source of reading matter. Thus, books in the school library should meet the children's reading interests, not just appeal to the adults who buy the books. In searching for subjects of interest to primary children, a clue could be taken from the findings of this study. The category of animals was by far the most popular category with both boys and girls. No particular animal seemed to be a favorite.

The reading interests of younger students should be of constant concern to educators. If children are to be expected to

maintain an interest in reading through their adult years, their reading interests must be developed to the fullest. The cultivation of reading interests must begin when reading instruction begins.

Suggestions for Further Research

1. A similar study with a larger, more representative sample would be useful in further determining the status of nonfiction in the lower grades.

2. A comparison of the amount of nonfiction read in free time with the amount of nonfiction in basals would provide further information on the status of nonfiction.

3. A study on the effect of more nonfiction in instructional material on boys' reading achievement could verify the need for books with more boy appeal.

4. A long-range study on the effects of more nonfiction in primary reading on success with content readers in the upper grades would be valuable.

5. The influence interest has on comprehension in the primary grades could also be investigated.

6. Other studies using a reading record should also be undertaken to further evaluate the use of this tool for measuring reading interests of younger students.

7. It would also be interesting to find if photographs or realistic pictures had a greater appeal to young children than more artistic illustrations. Perhaps it is the realism that attracts some children to nonfiction.

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APPENDIX A* p.____

NAME_____ GRADE_____ TEACHER_____

BOOKS I HAVE READ

	Circle the answers to the following questions.	Fiction (F) or Nonfiction (N)	Where did you get the book?	Did you finish it?	How would you rate the book?
1.	Title:	F N	S.L. C.L. H.L.	Yes No	Very good Good
	Author:		B.C. G. O.		Fair Poor
2.	Title:	F N	S.L. C.L. H.L.	Yes No	Very good Good
	Author:		B.C. G. O.		Fair Poor
3.	Title:	F N	S.L. C.L. H.L.	Yes No	Very good Good
	Author:		B.C. G. O.		Fair Poor
4.	Title:	F N	S.L. C.L. H.L.	Yes No	Very good Good
	Author:		B.C. G. O.		Fair Poor
5.	Title:	F N	S.L. C.L. H.L.	Yes No	Very good Good
	Author:		B.C. G. O.		Fair Poor
6.	Title:	F N	S.L. C.L. H.L.	Yes No	Very good Good
	Author:		B.C. G. O.		Fair Poor

* The original sheet was done on longer paper.

** Abbreviations represent the following sources:

S.L. = School Library C.L. = Class Library H.L. = Hunterdon County Library

B.C. = Book Club G. = Gift O. = Other Sources

COURSE WORK FOR MASTER'S DEGREE IN READING

Spring, 1970		**Instructor**
290:540	Psychology of Learning	Dr. Bloom
Summer, 1970		
299:561	ndations of Reading Instruction	Mrs. Kimberly
Fall, 1970		
299:564	Remedial Reading	Dr. Fry
Spring, 1971		
299:565	Laboratory in Remedial Reading	Mrs. Kimberly
Summer, 1971		
610:581	Reading Materials for Children	Dr. Van Order
Fall, 1971		
299:510	Reading and Communication in Education	Dr. Shew
Spring, 1972		
290:501	Introduction to Educational Tests and Measurement	Dr. Geyer
Fall, 1972		
290:509	Emotional and Social Maladjustment	Dr. Bardon
Spring, 1973		
290:525	Psychology of the Exceptional Child	Dr. Holowinsky
Summer, 1973		
299:515	Reading for Secondary, College and Adult Students	Dr. Finn
Fall, 1973		
299:566	Seminar in Reading Research and Supervision	Dr. Fry
Spring, 1974		
299:599	Master's Thesis Research	Dr. Fr
Summer, 1974		
290:513	Introduction to Early and Middle Years of Childhood	Dr. Arnold

ABSTRACT

The study was designed to investigate the status of nonfiction in the reading interests of second, third and fourth graders. The investigator felt that nonfiction in general has been overlooked by adults as reading material for lower grade students for a variety of reasons. Variables of grade, sex and reading ability were used.

A second purpose was to determine the effectiveness of a personal reading record as a measure of reading interests. This proved to be a useful tool for measuring reading interests because it provided long-range information on books obtained from a variety of sources. A third purpose of the study was to learn more about the reading habits of lower grade students in terms of the average number of books read per month, the main sources of books and the kinds of nonfiction books that were most popular.

All students in the second, third and fourth grades of a middle-class rural area in Central New Jersey took part in the study. Each student was asked to keep a record of the books that he read in his free time for a period of three months. When the sheets were collected, a stratified random sample was taken to provide a population of one hundred twenty students, forty at each of the three grade levels. The percent of nonfiction books read was calculated for each of the reading records of these students. Frequency tables were made for the percents by grade, sex and reading ability. A chi square test for independent samples was done for each of the three variables.

The results showed that there was no significant increase in the number of nonfiction books read as the grade increased, but an average of one fifth of the books read by each grade was nonfiction. There was no statistical difference between the percent of nonfiction read by boys and that read by girls, but the value of chi square was close (.08) to the .05 level of significance required. Reading ability was also shown to have no effect on the amount of nonfiction read. Of the three variables, however, sex had the greatest influence on the amount of nonfiction read.

Secondary data also obtained from the reading records provided this additional information. The girls at or above grade level in reading read the most books per month. The school library was the principal source of books. The category of animals was the outstanding favorite for both boys and girls for nonfiction categories, but the other choices differed for each sex after the first.

Three conclusions were drawn from the results of the study. First, educators and publishers should make attempts to provide more nonfiction stories in primary materials and more nonfiction books for independent reading at a lower readability. Second, reading instruction should consider sex differences even in the primary grades. Nonfiction material may be able to put more boy appeal into reading instruction to reduce the number of boys that are reluctant readers. Finally, the school library should be considered an important source of books and should be stocked with the books which will meet the reading interests of as many students as possible.